

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed June 4, 2004. In order to advance prosecution of this case, Applicants amend Claims 1, 5, 9, 11-19. Applicants respectfully request reconsideration and favorable action in this case.

Section 112 Rejections

The Examiner rejects Claims 9, 12, 14-15, and 17-19 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. To expedite prosecution of this Application, Applicants amend Claims 9, 12, 14-15, and 17-19 to address the Examiner's concerns.

Section 103 Rejections

The Examiner rejects Claims 1-19 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,734,661 issued to Roberts et al. ("Roberts"). Claim 1 recites:

An in-chip monitoring apparatus, comprising:
a test pad;
a transmission gate attached to a surface of a substrate and coupled to the test pad;
a plurality of electrical components attached to the surface of the substrate, wherein the plurality of electrical components includes a plurality of test components coupled to the transmission gate; and
a logic block operatively coupled to the transmission gate, the logic block operable to receive a code word uniquely associated with one of the plurality of test components-and to control operation of the transmission gate in order to route, based on the code word, a signal outputted by the one of the plurality of test components to the test pad.

Roberts fails to disclose, teach, or suggest every element of Claim 1. For example, *Roberts* fails to disclose a "logic block operable to receive a code word uniquely associated with one of the plurality of test components." The cited portions of *Roberts* do not disclose any code word *uniquely associated* with any component. Instead, the operation of multiple transmission gates in *Roberts* is controlled by a single TEST* signal. Col. 4, ll. 59-62. The TEST* signal controls the operation of multiple transmission gates, each associated with multiple test circuits 44a,b. Col. 4, ll. 59-62. Therefore, *Roberts* does not disclose "a code word uniquely associated with one of the plurality of test components" or "[a] logic block

operable to receive a code word uniquely associated with one of the plurality of test components and to control operation of the transmission gate in order to route, based on the code word, a signal outputted by the one of the plurality of test components to the test pad” as recited by Claim 1.

As a result, *Roberts* does not teach, disclose, or suggest every element of amended Claim 1. Claim 1 is thus allowable for at least this reason. Applicants respectfully request reconsideration and allowance of Claim 1 and its dependents.

Additionally, many of the dependents of Claim 1 include other elements that are also not disclosed in the cited references. For example, Claim 5 as amended recites:

An apparatus as in Claim 1, further comprising:

a code word generator to automatically generate a plurality of code words and to automatically transmit each of the plurality of code words separately to the logic block.

Roberts fails to disclose any form of code word generator. According to the Examiner, “*Roberts* teaches that the switch controller (100) uses a logic and [sequence] decoder (120) and address decoder (122) for NAND gates for generating test signals (column 7 lines 1-51).” Applicants, however, respectfully note that the logic and sequence decoder and the address decoder of *Roberts* merely decode address signals received by these components. Col. 7, ll. 32-35. Thus, *Roberts* fails to disclose a code word generator “to automatically generate a plurality of code words” and a code word generator “to automatically transmit each of the plurality of code words separately to the logic block” as recited by Claim 5. As a result, *Roberts* fails to disclose, teach, or suggest at least this additional element of Claim 5. Thus, for at least this additional reason, Claim 5 is allowable. As noted above, Applicants respectfully request reconsideration and allowance of Claim 5.

Although of differing scope from Claim 1, Claims 11, 13, and 16 include elements that, for reasons substantially similar to those discussed above with respect to Claim 1, are not disclosed, taught, or suggested by *Roberts*. Claims 11, 13, and 16 are thus allowable for at least these reasons. Applicants respectfully request reconsideration and allowance of Claims 11, 13, and 16, and their respective dependents.

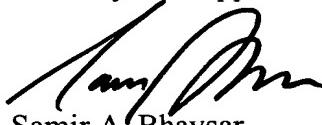
Conclusions

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending Claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicants stands ready to conduct such a conference at the convenience of the Examiner.

The Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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